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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,734	01/17/2002	Richard E. Lyon	FAA 00-4	2574

7590

05/17/2004

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EXAMINER

NOLAND, THOMAS

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,734

Applicant(s)

LYON ET AL.

Examiner

Thomas P. Noland

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The amendment filed Dec. 31, 2003 has been entered.
2. Claims 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what is meant by "a mixture of the types of plastic normally found in the cargo compartment of an airplane". Applicant's argument that this is clear because the specification refers to types of plastic typically found in luggage is noted but such is not believed to remove the unclarity since the term is clearly not specific and plastic other than that in the luggage might typically be found in the cargo compartment, for example making up part of the structure therein. It is suggested that lines 2-3 of claim 12 be replaced with - - - mixture of types of plastic. - - - .

3. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bute US 4,271,643 in view of Spector et al US 5,610,359.

Bute in Fig. 1 and the abstract discloses a smoldering fire detector substantially as claimed but does not generate the smoke with a porous sample having an internal heating element. But such is a known configuration for a smoke generator as evident from Fig. 1 and col. 11, lines 57- col. 12, line 4 of Spector et al which shows an igniter element 14 embedded in the sample and would thus have been obvious to have incorporated into a testing system similar to that of Bute for greater control of the simulation. Spector et al also indicates that such systems are useful in the storage

compartments of aircraft in col. 13, lines 47-52 and thus at least provides some suggestion of the desirability of the use of such systems in aircraft. This in combination with the general expedient of making the material of the substance being simulated would have made it an obvious expedient when simulating a test involving a fire in an airplane of such material to have used such material. Likewise adding a flammable liquid to simulate an actual fire in addition to smoldering or to make the smoldering rate change would have been an obvious expedient to increase the accuracy of the simulation.

4. Claims 14-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

5. Applicant's arguments filed Dec. 31, 2003 have been fully considered but they are not persuasive. While agreed that neither reference shows all of the features claimed it is believed the teachings of the references in combination for the reasons set forth in the prior art rejection render the invention of claims 11-13 obvious.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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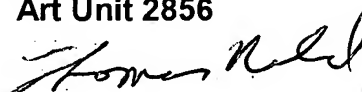
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Noland whose telephone number is (571) 272-2202. The examiner can normally be reached on weekdays from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Hezron E. Williams, can be reached on (571) 272-2208.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Thomas P. Noland
Primary Examiner
Art Unit 2856



tpn
May 11, 2004